

Air Quality PERMIT TO CONSTRUCT

State of Idaho Department of Environmental Quality **PERMIT No.:** P-040320

FACILITY ID No.: 029-00003

AQCR: 61

CLASS: A

SIC: 2874

ZONE: 12

UTM COORDINATE (km): 455.8, 4731.8

1. **PERMITTEE**

Nu-West Industries, Inc.; Agrium Conda Phosphate Operations

2. PROJECT

Phosphoric Acid Plants and Granulation Plant

3. MAILING ADDRESS 3010 Conda Road	CITY Soda Springs	STATE ID	ZIP 83276
4. FACILITY CONTACT Coleman Kavanagh	TITLE Environmental Supervisor	TELEPHONE (208) 547-4381 ext. 263	
5. RESPONSIBLE OFFICIAL Charles H. Ross	TITLE General Manager	TELEPHONE (208) 547-4381	
6. EXACT PLANT LOCATION 7 miles north of Soda Springs, 1.2 miles east o	COUNTY Caribou		

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Phosphate-based fertilizer products

8. GENERAL CONDITIONS

This permit is issued according to IDAPA 58.01.01.200, Rules for the Control of Air Pollution in Idaho, and pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be constructed or modified by this permit.

This permit (a) does not affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to damage to person or property caused by, resulting from, or arising out of the design, installation, maintenance, or operation of the proposed equipment; (c) does not release the permittee from compliance with other applicable federal, state, tribal, or local laws, regulations, or ordinances; (d) in no manner implies or suggests that the Department of Environmental Quality (DEQ) or its officers, agents, or employees, assume any liability, directly or indirectly, for any loss due to damage to person or property caused by, resulting from, or arising out of design, installation, maintenance, or operation of the proposed equipment.

This permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented with its application. Changes of design or equipment may require DEQ approval pursuant to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200, et seq.

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TONI HARDESTY, DIRECTOR DEPARTMENT OF ENVIRONMENTAL QUALITY	DATE ISSUED:	Public Comment Draft

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Acronyms, Units, and Chemical Nomenclature

AIRS Aerometric Information Retrieval System

AQCR Air Quality Control Region

ASTM American Society for Testing and Materials

CFR Code of Federal Regulations

CO carbon monoxide

DEQ Department of Environmental Quality

dscf dry standard cubic feet

EPA U.S. Environmental Protection Agency

gpm gallons per minute

 $\begin{array}{ll} \text{gr} & \text{grain (1 lb} = 7,000 \text{ grains)} \\ \text{HAPs} & \text{hazardous air pollutants} \end{array}$

IDAPA a numbering designation for all administrative rules in Idaho promulgated in accordance with the

Idaho Administrative Procedures Act

km kilometer

lb/hr pound per hour

MACT Maximum Achievable Control Technology

MMBtu million British thermal units

NESHAP Nation Emission Standards for Hazardous Air Pollutants

NO₂ nitrogen dioxide NO_x nitrogen oxides

NSPS New Source Performance Standards

O&M operations and maintenance P_2O_5 phosphorus pentoxide PM particulate matter

 PM_{10} particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers

PTC permit to construct

RATA relative accuracy test audit

scf standard cubic feet

SIC Standard Industrial Classification

 SO_2 sulfur dioxide SO_x sulfur oxides T/yr tons per year U.S.C United States Code

UTM Universal Transverse Mercator VOC volatile organic compound

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1. PERMIT TO CONSTRUCT SCOPE

Purpose

- 1.1 The purpose of this PTC modification is to increase the limit on P_2O_5 feed to the Superphosphoric Acid Process Line from 225,000 to 345,000 tons per year. This modification will also improve the operating, monitoring and recordkeeping requirements necessary for maintaining compliance with the five tons/yr NO_x emissions limit for the Superphosphoric Acid Oxidation Process. An in-situ NO_x monitoring system will be used for this purpose instead of relying on an equivalent P_2O_5 feed limit for the Superphosphoric Acid Process line.
- 1.2 This PTC replaces the following PTC(s), the terms and conditions of which shall no longer apply:
 - PTC No. 020-00003 issued on July 12, 2000

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2. FACILITY-WIDE CONDITIONS

Emission Limits

2.1 Opacity Limit

Visible emissions from any stack, vent, or other functionally equivalent opening shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period, as required in IDAPA 58.01.01.625. Opacity shall be determined using IDAPA 58.01.01.625.

2.2 Fugitive Dust Emissions

Fugitive emissions shall not be observed leaving the property for a period or periods aggregating more than three minutes in any 60-minute period. Visible emissions shall be determined by EPA Reference Method 22, as described in 40 CFR 60, Appendix A, or by an Idaho Department of Environmental Quality (DEQ) approved alternative method.

Operating Requirements

2.3 Evaporative Cooling Tower

No owner or operator shall introduce into any evaporative cooling tower any liquid effluent from any wet scrubbing device installed to control emissions from process equipment in accordance with 40 CFR 63.603(e).

2.4 Applicability of MACT General Provisions

In accordance with 40 CFR 63.608 and 63.628, the owner or operator shall comply with the requirements of the general provisions in 40 CFR Part 63, Subpart A as shown in Appendix A to 40 CFR Part 63, Subpart AA and as shown in Appendix A to 40 CFR Part 63, Subpart BB.

2.5 Reasonable Control of Fugitive Emissions

All reasonable precautions shall be taken to prevent particulate matter from becoming airborne, in accordance with IDAPA 58.01.01.651 (*Rules for the Control of Air Pollution in Idaho*). In determining what is reasonable, considerations will be given to factors such as the proximity of dust emitting operations to human habitations, and/or activities and atmospheric conditions which might affect the movement of particulate matter. Some of the reasonable precautions include, but are not limited to, the following:

- 2.5.1 Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands;
- 2.5.2 Application, where practical, of asphalt, oil, water or suitable chemicals to, or covering of, dirt roads, material stockpiles, and other surfaces which can create dust;

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- 2.5.3 Installation and use, where practical, of hoods, fans and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations;
- 2.5.4 Covering, where practical, of open bodied trucks transporting materials likely to give rise to airborne dusts;
- 2.5.5 Paving of roadways and their maintenance in a clean condition, where practical; or
- 2.5.6 Prompt removal of earth or other stored material from streets, where practical.

2.6 Phosphoric Acid Manufacturing Plant MACT Compliance Dates

- 2.6.1 In accordance with 40 CFR 63.609(a), each owner or operator of an existing affected source at a phosphoric acid manufacturing plant shall achieve compliance with the requirements of 40 CFR Part 63, Subpart AA no later than June 10, 2002. Notwithstanding the requirements of 40 CFR 63.7(a)(2)(iii), each owner or operator of an existing source at an affected existing phosphoric acid manufacturing plant shall fulfill the applicable requirements of 40 CFR 63.606 no later than June 10, 2002.
- 2.6.2 In accordance with 40 CFR 63.609(b), each owner or operator of a phosphoric acid manufacturing plant that commences construction or reconstruction of an affected source after December 27, 1996, shall achieve compliance with the requirements of 40 CFR Part 63, Subpart AA upon startup of operations or by June 10, 1999, whichever is later.

2.7 Phosphoric Acid Manufacturing Plant Exemption From New Source Performance Standards

In accordance with 40 CFR 63.610, any affected source subject to the provisions of 40 CFR Part 63, Subpart AA is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart T, Subpart U or Subpart NN. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of 40 CFR Part 63, Subpart AA. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of 40 CFR 63.604, 63.605 and 63.606 have been met.

2.8 Phosphate Fertilizers Production Plant MACT Compliance Dates

- 2.8.1 In accordance with 40 CFR 63.630(a), each owner or operator of an existing affected source at a phosphate fertilizers production plant shall achieve compliance with the requirements of 40 CFR Part 63, Subpart BB no later than June 10, 2002. Notwithstanding the requirements of 40 CFR 63.7(a)(2)(iii), each owner or operator of an existing affected source at a phosphate fertilizers production plant shall fulfill the applicable requirements of 40 CFR 63.626 no later than June 10, 2002.
- 2.8.2 In accordance with 40 CFR 63.630(b), each owner or operator of a phosphate fertilizers production plant that commences construction or reconstruction of an affected source after December 27, 1996, shall achieve compliance with the requirements of 40 CFR Part 63, Subpart BB upon startup of operations or by June 10, 1999, whichever is later.

2.9 Phosphate Fertilizers Production Plant Exemption From New Source Performance Standards

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In accordance with 40 CFR 63.631, any affected source subject to the provisions of 40 CFR Part 63, Subpart BB is exempted from any otherwise applicable new source performance standard contained in 40 CFR Part 60, Subpart V, Subpart W, or Subpart X. To be exempt, a source must have a current operating permit pursuant to Title V of the Act and the source must be in compliance with all requirements of 40 CFR Part 63, Subpart BB. For each affected source, this exemption is effective upon the date that the owner or operator demonstrates to the Administrator that the requirements of 40 CFR 63.624, 63.625 and 63.626 have been met.

Monitoring and Recordkeeping Requirements

2.10 MACT Recordkeeping Requirements

In accordance with 40 CFR 63.607(b) and 63.627(b), each owner or operator subject to the requirements of either 40 CFR Part 63, Subpart AA or 40 CFR Part 63, Subpart BB shall comply with the recordkeeping requirements in 40 CFR 63.10.

2.11 Fugitive Dust Control Log

Unless specified elsewhere in this permit, the permittee shall monitor and record in a log the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions. The most recent two years' compilation of data shall be kept on site and shall be made available to DEQ representatives upon request.

Reporting Requirements

2.12 Performance Test Protocol

The permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test or shorter time period as provided in a permit, order, consent decree or by DEQ approval. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

All testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, prior to conducting any compliance test, the permittee is strongly encouraged to submit in writing to DEQ, at least 30 days in advance, the following for approval:

- The type of method to be used;
- Any extenuating or unusual circumstances regarding the proposed test; and
- The proposed schedule for conducting and reporting the test.

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2.13 Performance Test Report

Within 30 days following the date in which a compliance test required by this permit is concluded, the permittee shall submit to DEQ a compliance test report for the respective test. The compliance test report shall include all process operating data collected during the test period as well as the test results, raw test data and associated documentation, including any approved test protocol in accordance with IDAPA 58.01.01.157.

The proposed test date(s), test date rescheduling notice(s), compliance test report, and all other correspondence shall be sent to:

Air Quality Permit Compliance Department of Environmental Quality Pocatello Regional Office 444 Hospital Way, # 300 Pocatello, Idaho 83201 Office: (208) 236-6160

Fax: (208) 236-6168

2.14 Evaporative Cooling Tower

Each owner or operator of an affected source subject to the evaporative cooling tower requirements in 40 CFR 63.603(e) must certify to the Administrator annually that he/she has complied with the requirements contained in that section, in accordance with 40 CFR 63.603(e).

2.15 MACT Notification Requirements

In accordance with 40 CFR 63.607(a) and 63.627(a), each owner or operator subject to the requirements of either 40 CFR Part 63, Subpart AA or 40 CFR Part 63, Subpart BB shall comply with the notification requirements in 40 CFR 63.9.

2.16 Certification of Documents

All documents including, but not limited to, application forms for Permits to Construct, records, supporting information, requests for confidential treatment, testing report, compliance certifications, and monitoring data submitted to DEQ shall contain a certification by a responsible official in accordance with IDAPA 58.01.01.123. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.

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3. PHOSPHORIC ACID PROCESS LINE, SUPERPHOSPHORIC ACID PROCESS LINE, AND PURIFIED PHOSPHORIC ACID LINE

Emission Limits

3.1 Fluoride - Wet Process Phosphoric Acid Process Line Requirement

In accordance with 40 CFR 63.603(a), on and after the date on which the performance test required to be conducted by 40 CFR 63.7 and 63.606 is required to be completed, no owner or operator subject to the provisions of 40 CFR Part 63, Subpart AA shall cause to be discharged into the atmosphere from any affected source any gases which contain total fluorides in excess of 6.750 gram/metric ton of equivalent P_2O_5 feed (0.01350 lb/ton). 40 CFR 63.601 defines a wet process phosphoric acid process line as any process line manufacturing phosphoric acid by reacting phosphate rock and acid. The Conditioning Vent Scrubber System is part of the Phosphoric Acid Production Process.

3.2 Fluoride - Superphosphoric Acid Process Line Requirement

In accordance with 40 CFR 63.603(b), on and after the date on which the performance test required to be conducted by 40 CFR 63.7 and 63.606 is required to be completed, no owner or operator subject to the provisions of 40 CFR Part 63, Subpart AA shall cause to be discharged into the atmosphere from any affected source any gases which contain total fluorides in excess of 4.350 gram/metric ton of equivalent P_2O_5 feed (0.00870 lb/ton). 40 CFR 63.601 defines a superphosphoric acid process line as any process line which concentrates wet-process phosphoric acid to 66% or greater P_2O_5 by weight.

3.3 NO_x - Superphosphoric Acid Oxidation Process

Emissions of oxides of nitrogen (NO_x) from the Superphosphoric Acid Oxidation Process shall not exceed the emission rate limit listed in the Appendix of this permit.

Operating Requirements

3.4 Pressure Drops and Flow Rates for Wet Scrubbers

In accordance with 40 CFR 63.604, on or after the date on which the performance test required to be conducted by 40 CFR 63.7 and 63.606 is completed, the owner/operator using a wet scrubbing emission control system must maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to the requirements of 40 CFR 63.605(d)(1) or (2).

3.5 P₂O₅ Throughput - Superphosphoric Acid Process

The equivalent P_2O_5 feed to the Superphosphoric Acid Process Line shall not exceed 345,000 tons per any consecutive 12-month period.

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3.6 Superphosphoric Acid Oxidation Process - NO_x Control

When the Superphosphoric Acid Oxidation Process is operating, the permittee shall comply with the following for purposes of demonstrating compliance with the NO_x emissions rate limit in Permit Condition 3.3:

- 3.6.1 The permittee shall install, maintain and operate catalytic control equipment to control emissions of NO_x from the Superphosphoric Acid Oxidation Process.
- 3.6.2 The permittee shall install, calibrate, maintain, and operate equipment to continuously measure the NO_x emissions rate, in pounds for each hour of operation and in tons per month, discharged to the atmosphere from the Superphosphoric Acid Oxidation Process stack.
- 3.6.3 The following NO_x monitor information shall be recorded:
 - on a monthly basis, the NO_x emissions rate shall be recorded in tons per month and tons per each consecutive 12-month period;
 - all periods during which the NO_x control equipment and/or the NO_x monitor were not operational;
 - the results of all daily monitor calibrations.

The most recent two years' compilation of data shall be kept on-site, in a log, and shall be made available to DEQ representatives upon request.

- 3.6.4 Calibration of the continuous NO_x monitor shall be maintained by performing the following:
 - calibrations at least daily using a reference gas; and
 - calibration in accordance with the manufacturer's specifications or as approved by DEQ.
- 3.6.5 The NO_x control equipment and the equipment for measuring and recording the NO_x emissions rate shall be maintained and operated according to manufacturer's specifications or as approved by DEQ. For this purpose, the following shall remain on site at all times and shall be made available to DEQ representatives upon request: a copy of the manufacturer's specifications and all DEQ approved operating, maintenance and calibration specifications; and the most recent two years compilation of NO_x monitoring data and maintenance logs for the NO_x monitoring equipment.

Monitoring and Recordkeeping Requirements

3.7 <u>Throughput Monitoring Systems</u>

In accordance with 40 CFR 63.605(a), each owner or operator of a new or existing wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, or phosphate rock calciner subject to the provisions of 40 CFR Part 63, Subpart AA shall install, calibrate, maintain, and operate a monitoring system which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of $\pm 5\%$ over its operating range.

3.8 P₂O₅ Throughput

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In accordance with 40 CFR 63.605(b)(1), each owner or operator of a new or existing wet-process phosphoric acid process line or superphosphoric acid process line subject to the provisions of 40 CFR Part 63, Subpart AA shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of 40 CFR 63.605(a) and then proceeding according to 40 CFR 63.606(c)(3).

3.9 Pressure Drop Across Each Scrubber

In accordance with 40 CFR 63.605(c)(1), each owner or operator of a new or existing wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer or phosphate rock calciner using a wet scrubbing emission control system shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of $\pm 5\%$ over its operating range.

3.10 Liquid Flow Rate of Each Scrubber

In accordance with 40 CFR 63.605(c)(2), each owner or operator of a new or existing wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer or phosphate rock calciner using a wet scrubbing emission control system shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of $\pm 5\%$ over its operating range.

3.11 Scrubber Pressure Drop and Liquid Flow Rate Ranges

Following the date on which the performance test required in 40 CFR 63.606 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in 40 CFR Part 63, Subpart AA must establish allowable ranges for operating parameters using the methodology specified in either 40 CFR 63.605(d)(1) or (2).

3.12 Sulfiding Vent Scrubber Pressure Drop and Liquid Flow Rate

- 3.12.1 The permittee shall install, calibrate, maintain, and operate, in accordance with manufacturer's specifications, equipment to continuously measure the pressure differential across the scrubber and the scrubbing media flowrate to the scrubber.
- 3.12.2 The pressure drop across the scrubber and the scrubbing media flowrate to the scrubber shall be maintained within the manufacturers and O&M Manual specifications when it is operated. Documentation of both the manufacturer's and O&M Manual operating pressure drop and scrubbing media flowrate specifications shall remain on site at all times and shall be available to DEQ representatives upon request.
- 3.12.3 The permittee shall monitor and record the pressure drop across the scrubber and the scrubbing media flowrate to the scrubber on a daily basis when it is operated. The most recent two years' compilation of

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data shall be kept on-site, in a log, and shall be made available to DEQ representatives upon request.

3.13 Filter Aid Silo Baghouse Pressure Drop

- 3.13.1 The permittee shall install, calibrate, maintain, and operate, in accordance with manufacturer's specifications, equipment to continuously measure the pressure differential across the baghouse.
- 3.13.2 The pressure drop across the baghouse shall be maintained within the manufacturer's and O&M Manual specifications when it is operated. Documentation of both the manufacturer's and O&M Manual operating pressure drop specifications shall remain on site at all times and shall be available to DEQ representatives upon request.
- 3.13.3 The permittee shall monitor and record the pressure drop across the baghouse on a weekly basis when it is operated. The most recent two years' compilation of data shall be kept on-site, in a log, and shall be made available to DEQ representatives upon request.

3.14 Performance Testing for Existing Units

On or before the applicable compliance date in 40 CFR 63.609 and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, and phosphate rock calciner. The owner or operator shall conduct the performance test according to the procedures in 40 CFR Part 63, Subpart A and in 40 CFR 63.606.

3.15 Performance Testing for New Units

As required by 40 CFR 63.7(a)(2) and once per annum thereafter, each owner or operator of a phosphoric acid manufacturing plant shall conduct a performance test to demonstrate compliance with the applicable emission standard for each new wet-process phosphoric acid process line, superphosphoric acid process line, phosphate rock dryer, and phosphate rock calciner. The owner or operator shall conduct the performance test according to the procedures in 40 CFR Part 63, Subpart A and in 40 CFR 63.606.

3.16 Performance Test Methods

In conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR part 60, appendix A, or other methods and procedures as specified in 40 CFR 63.606, except as provided in 40 CFR 63.7(f).

3.17 Performance Testing - Fluorides

Each owner or operator of a new or existing wet-process phosphoric acid process line or superphosphoric acid process line shall determine compliance with the applicable total fluorides standards in 40 CFR 63.602 or 63.603, as specified in 40 CFR 63.606(c).

3.18 Operations and Maintenance Manual Requirements

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The permittee shall maintain and implement an Operations and Maintenance (O&M) Manual for the Sulfiding Vent Scrubber and the Filter Aid Silo Baghouse which describes the procedures that will be followed to comply with General Provision B and the air pollution control device requirements contained in this permit. The manual shall remain on site at all times and shall be available to DEQ representatives upon request.

3.19 NSR Projected Emissions Records

The permittee shall maintain records and provide reports as follows for the project to increase the P_2O_5 feed input to the SPA in accordance with IDAPA 58.01.01.205.01 [40 CFR 52.21(r)(6) and (7)]:

- 3.19.1 In accordance with 40 CFR 52.21(r)(6)(i), before beginning actual construction of the project, the owner or operator shall document and maintain a record of the following information:
 - (a) A description of the project;
 - (b) Identification of the emissions unit(s) whose emissions of a regulated NSR pollutant could be affected by the project (i.e., Superphosphoric Acid (SPA) Plant, Phosphoric Acid Plant, Boiler B-5, Thermal Oil Heaters, SPA Oxidizer, ore storage and transfer fugitive emissions, and gypsum stack fugitive emissions (including roadway dust)); and
 - (c) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including the baseline actual emissions and the projected actual emissions.
- 3.19.2 In accordance with 40 CFR 52.21(r)(6)(iii), the owner or operator shall monitor the emissions of NO_x, Fluoride, CO, PM₁₀, PM, and VOC from the emissions units listed in Permit Condition 3.19.1; and calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five years following resumption of regular operations after the change.
- 3.19.3 In accordance with 40 CFR 52.21(r)(6)(v), the owner or operator shall submit a report to DEQ and the EPA Administrator if the annual emissions, in tons per year, from the project identified under Permit Condition 3.19.1, exceed the baseline actual emissions (as documented and maintained pursuant to Permit Condition 3.19.1(c)), by a significant amount (as defined in 40 CFR 52.21(b)(23)) for that regulated NSR pollutant, and if such emissions differ from the preconstruction projection as documented and maintained pursuant to Permit Condition 3.19.1(c). Such report shall be submitted to DEQ and the EPA Administrator within 60 days after the end of such year. In particular, in accordance with IDAPA 58.01.01.211.01, the permittee shall submit a report when each of the following conditions occur:
 - (a) When the annual combined emissions of NO_x from all of the sources listed in Permit Condition 3.19.1 exceed 74.2 tons per year
 - (b) When the annual combined emissions of fluoride from all of the sources listed in Permit Condition 3.19.1 exceed 42.5 tons per year
 - (c) When the annual combined emissions of NO_x from all of the sources listed in Permit Condition 3.19.1 exceed 67.4 tons per year

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(d) When the annual combined emissions of fluoride from all of the sources listed in Permit Condition 3.19.1 exceed 41.8 tons per year

The information in Table 2.1 shall be used for purposes of complying with this requirement:

Table 2.1 40 CFR 52.21(r)(6)(v) INFORMATION FOR THE SPA PRODUCTION INCREASE PROJECT

TYPE OF EMISSIONS	NO _x (TPY)	Fluoride (TPY)
Baseline Actual Emissions (BAE)	34.2	39.5
Significant defined by 52.21(b)(23)	40	3
Annual emission rate that would exceed BAE by a significant amount	74.2	42.5
Preconstruction projection ^a	67.4	41.8

^{a.}Preconstruction projection is the same as projected actual emissions.

- 3.19.4 In accordance with 40 CFR 52.21(r)(6)(v), The report shall contain the following:
 - (a) The name, address and telephone number of the major stationary source;
 - (b) The annual emissions as calculated pursuant to paragraph (r)(6)(iii) of this section; and
 - (c) Any other information that the owner or operator wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection).
- 3.19.5 In accordance with 40 CFR 52.21(r)(7), the owner or operator of the source shall make the information required to be documented and maintained pursuant to 40 CFR 52.21(r)(6) of this section available for review upon a request for inspection by the Administrator or the general public pursuant to the requirements contained in 40 CFR 70.4(b)(3)(viii).

Reporting Requirements

3.20 MACT Performance Test Report

In accordance with 40 CFR 63.607(c), the owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 as follows:

- 3.20.1 Performance Test Report. As required by 40 CFR 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in 40 CFR 63.9
- 3.20.2 Excess Emissions Report. As required by 40 CFR 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in 40 CFR 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved, as described in 40 CFR 63.10.

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- 3.20.3 Summary Report. If the total duration of control system exceedances for the reporting period is less than one percent of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in 40 CFR 63.10, rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.
- 3.20.4 If the total duration of control system operating parameter exceedances for the reporting period is one percent or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and excess emissions report.

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4. GRANULATION PLANT

Emission Limits

4.1 Fluoride - Diammonium and/or Monoammonium Phosphate Process Line

In accordance with 40 CFR 63.623(a), on and after the date on which the performance test required to be conducted by 40 CFR 63.7 and 63.626 is completed, no owner or operator subject to the provisions of 40 CFR Part 63, Subpart BB shall cause to be discharged into the atmosphere from any affected source any gases which contain total fluorides in excess of 29.0 grams/metric ton of equivalent P_2O_5 feed (0.0580 lb/ton).

Operating Requirements

4.2 Pressure Drops and Flow Rates for Wet Scrubbers

In accordance with 40 CFR 63.624, on or after the date on which the performance test required to be conducted by 40 CFR 63.7 and 63.626 is completed, the owner/operator using a wet scrubbing emission control system must maintain daily averages of the pressure drop across each scrubber and of the flow rate of the scrubbing liquid to each scrubber within the allowable ranges established pursuant to the requirements of 40 CFR 63.625(f)(1) or (2).

Monitoring and Recordkeeping Requirements

4.3 Throughput Monitoring Systems

In accordance with 40 CFR 63.625(a), each owner or operator of a new or existing Diammonium and/or Monoammonium phosphate process line or granular triple superphosphate process line subject to the provisions of 40 CFR Part 63, Subpart BB shall install, calibrate, maintain, and operate a monitoring system which can be used to determine and permanently record the mass flow of phosphorus-bearing feed material to the process. The monitoring system shall have an accuracy of $\pm 5\%$ over its operating range.

4.4 P_2O_5 Throughput

In accordance with 40 CFR 63.625(b), each owner or operator of a new or existing Diammonium and/or Monoammonium phosphate process line or granular triple superphosphate process line subject to the provisions of 40 CFR Part 63, Subpart BB shall maintain a daily record of equivalent P_2O_5 feed by first determining the total mass rate in metric ton/hour of phosphorus bearing feed using a monitoring system for measuring mass flowrate which meets the requirements of 40 CFR 63.625(a) and then by proceeding according to 40 CFR 63.626(c)(3).

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4.5 Pressure Drop Across Each Scrubber

In accordance with 40 CFR 63.625(c)(1), each owner or operator of a new or existing Diammonium and/or Monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building using a wet scrubbing emission control system shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the pressure drop across each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of $\pm 5\%$ over its operating range.

4.6 Liquid Flow Rate of Each Scrubber

In accordance with 40 CFR 63.625(c)(2), each owner or operator of a new or existing Diammonium and/or Monoammonium phosphate process line, granular triple superphosphate process line, or granular triple superphosphate storage building using a wet scrubbing emission control system shall install, calibrate, maintain, and operate a monitoring system which continuously measures and permanently records the flow rate of the scrubbing liquid to each scrubber in the process scrubbing system in 15-minute block averages. The monitoring system shall be certified by the manufacturer to have an accuracy of $\pm 5\%$ over its operating range.

4.7 Scrubber Pressure Drop and Liquid Flow Rate Ranges

Following the date on which the performance test required in 40 CFR 63.626 is completed, the owner or operator of a new or existing affected source using a wet scrubbing emission control system and subject to emissions limitations for total fluorides or particulate matter contained in 40 CFR Part 63, Subpart BB must establish allowable ranges for operating parameters using the methodology specified in either 40 CFR 63.625(f)(1) or (2).

4.8 Urea Storage Baghouse Pressure Drop

- 4.8.1 The permittee shall install, calibrate, maintain, and operate, in accordance with manufacturer's specifications, equipment to continuously measure the pressure differential across the baghouse.
- 4.8.2 The pressure drop across the baghouse shall be maintained within the manufacturer's and O&M Manual specifications when it is operated. Documentation of both the manufacturer's and O&M Manual operating pressure drop specifications shall remain on site at all times and shall be available to DEQ representatives upon request.
- 4.8.3 The permittee shall monitor and record the pressure drop across the baghouse on a weekly basis when it is operated. The most recent two years' compilation of data shall be kept on-site, in a log, and shall be made available to DEQ representatives upon request.

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4.9 Performance Testing for Existing Units

On or before the applicable compliance date in 40 CFR 63.630 and once per annum thereafter, each owner or operator of a phosphate fertilizers production plant subject to the provisions of 40 CFR Part 63, Subpart BB shall conduct a performance test to demonstrate compliance with the applicable emission standard for each existing Diammonium and/or Monoammonium phosphate process line. The owner or operator shall conduct the performance test according to the procedures in 40 CFR Part 63, Subpart A and in 40 CFR 63.626.

4.10 Performance Testing for New Units

As required by 40 CFR 63.7(a)(2) and once per annum thereafter, each owner or operator of a phosphate fertilizer production plant subject to the provisions of 40 CFR Part 63, Subpart BB shall conduct a performance test to demonstrate compliance with the applicable emission standard for each new Diammonium and/or Monoammonium phosphate process line. The owner or operator shall conduct the performance test according to the procedures in 40 CFR Part 63, Subpart A and in 40 CFR 63.626.

4.11 Performance Test Methods

In conducting performance tests, each owner or operator of an affected source shall use as reference methods and procedures the test methods in 40 CFR part 60, Appendix A, or other methods and procedures as specified in 40 CFR 63.626, except as provided in 40 CFR 63.7(f).

4.12 Performance Testing - Fluorides

Each owner or operator of a new or existing Diammonium and/or Monoammonium phosphate process line shall determine compliance with the applicable total fluorides standards in 40 CFR 63.622 or 63.623, as specified in 40 CFR 63.626(c).

4.13 Operations and Maintenance Manual Requirements

Within 60 days after startup, the permittee shall have developed an Operations and Maintenance (O&M) Manual for the Urea Storage Baghouse, which describes the procedures that will be followed to comply with General Provision B and the air pollution control device requirements contained in this permit. The manual shall remain on site at all times and shall be available to DEQ representatives upon request.

Reporting Requirements

4.14 MACT Performance Test Report

In accordance with 40 CFR 63.627(c), the owner or operator of an affected source shall comply with the reporting requirements specified in 40 CFR 63.10 as follows:

4.14.1 Performance Test Report. As required by 40 CFR 63.10, the owner or operator shall report the results of the initial and annual performance tests as part of the notification of compliance status required in 40 CFR 63.9.

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- 4.14.2 Excess Emissions Report. As required by 40 CFR 63.10, the owner or operator of an affected source shall submit an excess emissions report for any exceedance of an operating parameter limit. The report shall contain the information specified in 40 CFR 63.10. When no exceedances of an operating parameter have occurred, such information shall be included in the report. The report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half. If exceedances are reported, the owner or operator shall report quarterly until a request to reduce reporting frequency is approved, as described in 40 CFR 63.10.
- 4.14.3 Summary Report. If the total duration of control system exceedances for the reporting period is less than one percent of the total operating time for the reporting period, the owner or operator shall submit a summary report containing the information specified in 40 CFR 63.10 rather than the full excess emissions report, unless required by the Administrator. The summary report shall be submitted semiannually and shall be delivered or postmarked by the 30th day following the end of the calendar half.
- 4.14.4 If the total duration of control system operating parameter exceedances for the reporting period is one percent or greater of the total operating time for the reporting period, the owner or operator shall submit a summary report and the excess emissions report.

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5. CLEAVER-BROOKS BOILER

Emission Limits

5.1 NO_x Emission Limits

Oxides of nitrogen (NO_x) emissions from the boiler stack shall not exceed any corresponding emission rate limits listed in the Appendix of this permit.

5.2 NSPS NO_x Emission Limits

On and after the date the initial performance test is completed, or is required to be completed under 40 CFR 60.44b(a) (whichever comes first), the permittee shall not cause any gases that contain nitrogen oxides (expressed as NO₂) to be discharged into the atmosphere in excess of 0.10 pounds per million Btu (0.10 lb/MMBtu) heat input to the boiler at a low heat release rate (70,000 Btu/hr-ft³ or less), or in excess of 0.20 pounds per million Btu (0.20 lb/MMBtu) heat input to the boiler at a high heat release rate (greater than 70,000 Btu/hr-ft³).

5.2.1 In accordance with 40 CFR 60.44b(h) and for purposes of compliance with 40 CFR 60.44b(i), the nitrogen oxide standards under 40 CFR 60.44b apply at all times including periods of startup, shutdown, or malfunction. Except as provided under 40 CFR 60.44b(j), compliance with the emissions limits under 40 CFR 60.44b is determined on a 30-day rolling average basis.

Operating Requirements

5.3 Fuel Specification

The boiler shall use only natural gas as fuel.

5.4 Applicability of NSPS General Provisions

The permittee shall comply with the NSPS general provisions as specified in 40 CFR Part 60, Subpart A.

Monitoring, Recordkeeping, and Reporting Requirements

5.5 NO_x Performance Test

In accordance with 40 CFR 60.46b(c), compliance with the nitrogen oxides emission standards under 40 CFR 60.44b and the emission limits in the Appendix of this permit shall be determined through performance testing under 40 CFR 60.46b(e) or (g). This performance test, and any subsequent performance tests conducted to demonstrate compliance with this permit, shall be performed in accordance with IDAPA 58.01.01.157 and General Provision F of this permit.

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5.6 NO_x Monitoring, Recordkeeping, and Reporting

In accordance with 40 CFR 60.49b, the permittee shall comply with either the continuous monitoring system requirements under 40 CFR 60.48b(b) through 60.48b(f) or the predictive monitoring requirements under 40 CFR 60.48b(g) to demonstrate compliance with the nitrogen oxides emission monitoring requirements specified in 40 CFR 60.48b. The permittee shall also comply with the NSPS recordkeeping and reporting requirements specified in 40 CFR 60.49b and the notification and recordkeeping requirements specified in 40 CFR 60.7.

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6. APPENDIX

Nu-West Industries - Soda Springs

Annual (T/yr) Emission Limits^a

Source Description	NO _x (Ton/year) ^{b,c}
Cleaver-Brooks Boiler (CP-5536601)	33
Superphosphoric Acid Oxidation Process	5

a. As determined by a pollutant-specific U.S. EPA reference method, DEQ-approved alternative, or as determined by DEQ's emission estimation methods used in the permit application analysis.

As determined by multiplying the actual or allowable (if actual is not available) pound per hour, or pound per ton processed, emission rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

^{c.} T/yr is tons of emissions per any consecutive 12-month period

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7. PERMIT TO CONSTRUCT GENERAL PROVISIONS

- 1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act, Idaho Code §39-101, et seq.
- 2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.
- 3. The permittee shall allow the Director, and/or the authorized representative(s), upon the presentation of credentials:
 - To enter, at reasonable times, upon the premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
 - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and require stack compliance testing in conformance with IDAPA 58.01.01.157 when deemed appropriate by the Director.
- 4. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
- 5. The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211.01 and 211.03:
 - A notification of the date of initiation of construction, within five working days after occurrence;
 - A notification of the date of completion/cessation of construction, within five working days after occurrence;
 - A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date;
 - A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
 - A notification of the initial date of achieving the maximum production rate, within five working days after occurrence production rate and date
- 6. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

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All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

- 7. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.
- 8. In accordance with IDAPA 58.01.01.123, all documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.